

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An apparatus for plasma processing with which high-frequency electric power generated by a plurality of high-frequency electric power feeding circuit circuits is fed to a plurality of discharge electrodes, and a plasma is generated between the discharge electrodes and a substrate which are in a processing chamber into which a gas for processing has been introduced, so as to process a substance on the substrate,

the apparatus for plasma processing comprising:

a voltage distribution regulator ~~for adjusting~~ configured to adjust a deviation in distribution of voltage on the discharge electrodes, the distribution of voltage occurring in a direction at right angles to a direction of fed electric power through the discharge electrodes; and

a device configured to vary over time a phase difference between streams of the high-frequency electric power, which have the same frequency, supplied from the plurality of the high-frequency electric power feeding circuits, respectively.

Claim 2 (Currently Amended): An apparatus for plasma-enhanced chemical vapor deposition with which high-frequency electric power generated by a plurality of high-frequency electric power feeding circuit circuits is fed to a plurality of discharge electrodes, and a plasma is generated between the discharge electrodes and a substrate which are in a film formation chamber into which a gas for forming a film containing a substance has been introduced, so as to vapor deposit the substance on the substrate,

the apparatus for plasma-enhanced chemical vapor deposition comprising:

a voltage distribution regulator ~~for adjusting~~ configured to adjust a deviation in distribution of voltage on the discharge electrodes, the distribution of voltage occurring in a

direction at right angles to a direction of fed electric power through the discharge electrodes;  
and

a device configured to vary over time a phase difference between streams of the high-frequency electric power, which have the same frequency, supplied from the plurality of the high-frequency electric power feeding circuits, respectively.

Claim 3 (Currently Amended): An apparatus for plasma-enhanced chemical vapor deposition according to claim 2, wherein the voltage distribution regulator is an impedance changer which is provided to at least one of a plurality of high-frequency cables for supplying high-frequency electric power from ~~the~~ at least a high-frequency electric power feeding circuit to the plurality of discharge electrodes in order to change an impedance at a feeding point for the discharge electrodes toward the high-frequency electric power feeding circuit.

Claim 4 (Original): An apparatus for plasma-enhanced chemical vapor deposition according to claim 3, wherein the impedance changer is a stub comprising a branch cable which branches off from the high-frequency cable.

Claim 5 (Currently Amended): An apparatus for plasma-enhanced chemical vapor deposition according to claim 4, wherein the stub comprises a passive element which is connected to a distal end of the branch cable, and, with ~~s~~ a change in a constant of the passive element, the stub changes the impedance at a feeding point for the discharge electrodes toward the high-frequency electric power feeding circuit.

Claim 6 (Currently Amended): An apparatus for plasma-enhanced chemical vapor deposition according to claim 4, wherein, with a change in the cable length of the branch

cable, the stub changes the impedance at a feeding point for the discharge electrodes toward the at least high-frequency electric power feeding circuit.

Claim 7 (Currently Amended): An apparatus for plasma-enhanced chemical vapor deposition according to claim 4, wherein, with a change in the characteristic impedance of the branch cable itself, the stub changes the impedance at a feeding point for the discharge electrodes toward the at least high-frequency electric power feeding circuit.

Claim 8 (Withdrawn): An apparatus for plasma-enhanced chemical vapor deposition according to claim 2, wherein the voltage distribution regulator is an impedance changer which is provided between the discharge electrodes and a grounding point in order to change the impedance at a feeding point for the discharge electrodes toward the discharge electrodes.

Claim 9 (Withdrawn): An apparatus for plasma-enhanced chemical vapor deposition according to claim 8, wherein the impedance changer comprises a passive element which is connected between the discharge electrodes and the grounding point, and, with change in a constant of the passive element, the impedance changer changes the impedance between the discharge electrodes and the grounding point.

Claim 10 (Currently Amended): A method of processing a substrate with an apparatus for plasma processing by feeding high-frequency electric power generated by a plurality of high-frequency electric power feeding circuit-circuits to a plurality of discharge electrodes, and generating a plasma between the discharge electrodes and a substrate in a processing chamber into which a gas for processing has been introduced, so as to process a substance on the substrate,

the method of processing a substrate with an apparatus for plasma processing comprising:

adjusting a deviation in a distribution of voltage on the discharge electrodes, the distribution of voltage occurring in a direction at right angles to a direction of fed electric power through the discharge electrodes, whereby a distribution of voltage at an end part of the substrate, the end part being at an end in the direction at right angles to the direction of fed electric power, and a distribution of voltage at a central part of the substrate are balanced, and

varying over time a phase difference between streams of the high-frequency electric power, which have the same frequency, supplied from the plurality of the high-frequency electric power feeding circuits, respectively,

so that a film is formed on the substrate, the film having a distribution of voltage ~~which is applied between the discharge electrodes and the substrate in order to generate plasma thickness that~~ is made uniform over the entirety of the substrate.

Claim 11 (Currently Amended): A method for film formation with an apparatus for plasma-enhanced chemical vapor deposition by feeding high-frequency electric power generated by a plurality of high-frequency electric power feeding circuit-circuits to a plurality of discharge electrodes, and generating a plasma between the discharge electrodes and a substrate in a film formation chamber into which a gas for forming a film has been introduced, so as to vapor deposit the substance on the substrate,

the method for film formation with an apparatus for plasma-enhanced chemical vapor deposition comprising:

adjusting a deviation in distribution of voltage on the discharge electrodes, the distribution of voltage occurring in a direction at right angles to a direction of fed electric

power through the discharge electrodes, whereby a distribution of voltage at an end part of the substrate, the end part being at an end in the direction at right angles to the direction of fed electric power, and a distribution of voltage at a central part of the substrate are balanced, and

varying over time a phase difference between streams of the high-frequency electric power, which have the same frequency, supplied from the plurality of the high-frequency electric power feeding circuits, respectively,

so that a film is formed on the substrate, the film having a distribution of ~~voltage~~ which is applied between the discharge electrodes and the substrate in order to generate plasma thickness that is made uniform over the entirety of the substrate.